What Is Claimed Is:

1.   An image processing apparatus, comprising:

a density value detection part that detects a density value of a predetermined color component of image data representing a nearby image in the vicinity of an image to which additional data is to be added;

a pattern decision part that decides a pattern which is larger in an area at the higher density value detected by the density value detection part and has a shape corresponding to a value of the additional data to be added to the image; and

a pattern superimposing part that superimposes the pattern decided by the pattern decision part on image data representing the image.

2.   The image processing apparatus according to claim 1, further comprising a pattern storage part that stores plural patterns having different shapes and areas,

wherein the pattern decision part selects a pattern from the patterns stored in the pattern storage part.

3.   The image processing apparatus according to claim 1, further comprising an area changing part that changes the area of a pattern,

wherein the pattern decision part makes a decision by changing the area of a pattern having a shape corresponding to the value of additional data by the area changing part.

4.   The image processing apparatus according to claim 1, wherein the pattern decision part decides a wider pattern at the higher density value detected by the density value detection part.

5.   The image processing apparatus according to claim 1, wherein the density value detection part detects a density value of a yellow

component of the image data.

6.   The image processing apparatus according to claim 1, wherein the density value detection part detects a sum of weighed density values of the respective color components of the image data.

7.   The image processing apparatus according to claim 6, wherein the pattern superimposing part modulates amplitude of the pattern corresponding to the value of additional data according to the sum of weighed density values of the color components of the image data before superimposing the pattern.

8.   The image processing apparatus according to claim 6, wherein, of the color components, a cyan color is assigned a lower weight than other color components to find the sum of the weighed density values.

9.   The image processing apparatus according to claim 6, wherein, of the color components, a black or red color is assigned a higher weight than other color components to find the sum of the weighed density values.

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